



United States Environmental Protection Agency
Region 2
Caribbean Environmental Protection Division
City View Plaza II-Suite 7000, #48 Rd. 165 km 1.2
Guaynabo, Puerto Rico 00968-8069
NPDES NO. PR0023710

NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM PERMIT

The following Permittee is authorized to discharge subject to the requirements set forth in this permit:

Permittee (mailing address)	Facility (location address)
Puerto Rico Aqueduct and Sewer Authority (PRASA)	Arecibo RWWTP
P. O. Box 7066	PR Road 681, Km 2.0, Islote Ward # 2
San Juan, PR 00916-7066	Arecibo, PR 00612
EPA has classified this discharge as a major discharge.	

The Permittee may discharge from the discharge points identified below:

Outfall	Effluent description	Outfall latitude	Outfall longitude	Receiving water name and classification
001	Primary treatment wastewater.	18°, 29', 34" N	66°, 41', 25" W	Atlantic Ocean, Class SC waters

Issuance date	Effective date (EDP)	Expiration date	Renewal application date
<Issuance Date>	<Effective Date>	<Enter date 5 years from EDP>	<Enter date 180 days prior to Exp. Date>

To meet the provisions of the Clean Water Act (CWA) as amended, 33 *United States Code* (U.S.C.) 1251 *et seq.* and its implementing regulations, the Permittee must comply with the requirements in this permit.

I, **José C. Font, Director**, do hereby certify that this permit with all attachments is a full, true, and correct copy of the permit issued by EPA and certified by the Puerto Rico Environmental Quality Board, on **<Issuance Date>**.

Judith A. Enck
Region 2, Regional Administrator
U.S. Environmental Protection Agency

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PART I. BACKGROUND AND REQUIRED LIMITATIONS

- A. Rationale for Permit Requirements.** This permit is issued pursuant to CWA section 402 and implementing regulations adopted by EPA. EPA developed the requirements in this permit on the basis of information submitted as part of the complete application and monitoring and reporting requirements, and other available information. This permit contains TBELS based on **Primary Treatment Standards at 40 CFR Part 125. Subpart E – Criteria for Modifying the Secondary Treatment Requirements under Section 301(h) of the CWA**, and WQBELS based on the Puerto Rico Water Quality Standards Regulation (PRWQS), as amended. The accompanying Fact Sheet contains detailed information and rationale for permit requirements.
- B. Water Quality Certificate (WQC).** Pursuant to CWA section 401(a)(1), after due consideration of the applicable provisions established in the PRWQS and CWA sections 208(e), 301, 302, 303, 304(e), 306 and 307, on **September 29, 2014** the Puerto Rico Environmental Quality Board (EQB) certified that reasonable assurance was determined that the allowed discharge will not cause violations to the applicable water quality standards for the receiving water body if the limitations and monitoring requirements in the IWQC are met. Additional requirements could be required to comply with other sections of the CWA.
- C. Impaired Waters and Total Maximum Daily Loads (TMDLs).** This facility **does not discharge to** an impaired water.
- D. Mixing Zone/Dilution Allowance.** EQB has approved a mixing zone or dilution allowance for this discharge. On September 29, 2014 EQB issued a mixing zone approval **at 224:1**. A detailed discussion of any dilution allowance is included in the Fact Sheet for this permit.
- E. Antidegradation and Anti-backsliding Requirements.** The discharge is consistent with the federal anti-degradation provisions at 40 CFR 131.12, 72 Federal Register 238 (December 12, 2007, pages 70517-70526), and EQB's *Anti-Degradation Policy Implementation Procedure* in Attachment A of PRWQS. In addition, some effluent limitations in this permit are less stringent than those in the previous permit and the rationale for these limitations is provided in the Fact Sheet for this permit. An anti-backsliding analysis has been conducted and EPA has determined that these limitations are consistent with the anti-backsliding requirements at 40 CFR 122.44(l).
- F. Public Participation.** Federal regulations at 40 CFR 124 require EPA to consider all significant comments on the draft permit received during the public comment period in the development of the final permit. Any comments received will be provided in a Responsiveness Summary issued with the final permit.
- G. Required Effluent Limitations**

During the period beginning on the effective date and lasting until the expiration date of this permit, discharges from outfall 001 shall be limited and monitored by the Permittee as specified below:

- a. Permittee shall comply with the U.S. Environmental Protection Agency's (EPA's) technology based requirements and achieve water quality requirements as determined by the Commonwealth of Puerto Rico. See the Environmental Quality Board's (EQB's) water quality certificate (WQC) requirements from page 2 through 21 of the permit.
- b. Permittee shall comply with EPA's Pretreatment Program Requirements included from page 24 through page 26 of the permit.
- c. Permittee shall comply with EPA's Biosolids (Sewage Sludge) Requirements established in pages 26 and 28 of the permit.
- d. Permittee shall continue to conduct the EPA's Waiver Monitoring Program as revised; however, the Mixing Zone Validation Study shall be done in accordance with the EQB requirements established in Table A-1 and the special conditions of the permit.
- e. Permittee shall conduct a Non-industrial Source Control Program as established in Attachment #3 by EPA.
- f. Permittee shall comply with EPA's Prohibited Discharge Standards Requirements established in Attachment B of the permit.

PART II. EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS

A. Final Effluent Limitations—Outfall Number 001

The Permittee must maintain compliance with the following effluent limitations at Outfall 001. The discharge at Outfall 001 is composed of primary wastewater treatment.

Effluent Limitations Table

Parameter	Units	Effluent limitations			Monitoring requirements		Footnotes
		Average monthly	Average weekly	Maximum daily	Sample type	Minimum sampling frequency	
Effluent Flow	MGD	Monitor only	Monitor only	20.0	Metered	Continuous	(1)
Influent BOD, 5-day (20°C)	mg/L	Monitor only	Monitor only	--	24-Hr Composite	Twice/Week	
Effluent BOD, 5-day (20°C)	mg/L	--	--	120	24-Hr Composite	Twice/Week	θ
	kg/day	9,083	--	18,166			
	minimum % removal	30	--	--	Calculated	Twice/Week	
Influent TSS	mg/L	Monitor only	Monitor only	--	24-Hr Composite	Twice/Week	
Effluent TSS	mg/L	70	--	--	24-Hr Composite	Twice/Week	
	kg/day	8,326	--	16,652			
	minimum % removal	50	--	--	Calculated	Twice/Week	
2,4,6-Trichlorophenol	µg/L	--	--	Monitor only	Grab	α	
2,4-Dichlorophenol	µg/L	--	--	Monitor only	Grab	α	
2-Chlorophenol	µg/L	--	--	Monitor only	Grab	α	

Parameter	Units	Effluent limitations			Monitoring requirements		Footnotes
		Average monthly	Average weekly	Maximum daily	Sample type	Minimum sampling frequency	
2-Methyl-4,6-Dinitrophenol	µg/L	--	--	Monitor only	Grab	α	
Color	Pt-Co Units	--	--	Monitor only	Grab	1/Month	
Copper (Cu)	µg/L	--	--	55.26	Grab	1/Month	
Cyanide, Free (CN)	µg/L	--	--	10.2	Grab	1/Month	φ γ
Dissolved Oxygen (DO)	mg/L	--	--	Monitor only	Grab	1/Day	
Fecal Coliforms	(colonies/100 ml)	200	--	400	Grab	5/Month	(2)
	% Exceeding Limit	--	--	20	Calculated	5/Month	(3)
Nickel (Ni)	µg/L	--	--	9.48	Grab	1/Month	
Nitrogen (NO ₃ , NO ₂ , NH ₃)	µg/L	--	--	39,752	Grab	1/Month	
Oil and Grease	mg/L	--	--	Monitor	Grab	Twice/Month	
Pentachlorophenol	µg/L	--	--	Monitor only	Grab	α	
pH	standard units	Minimum 6.0 Maximum 9.0	--	--	Grab	1/Day	
Residual Chlorine	mg/L	--	--	0.50	Grab	1/Day	(4)
Silver (Ag)	µg/L	--	--	6.61	Grab	1/Month	
Solids and Other Matters	--	Monitor only	--	--	--	--	
Sulfide (undissociated H ₂ S)	µg/L	--	--	25	Grab	1/Month	δ
Surfactants (as Methylene Blue Activate Substances)	µg/L	--	--	7,969	Grab	1/Month	

Parameter	Units	Effluent limitations			Monitoring requirements		Footnotes
		Average monthly	Average weekly	Maximum daily	Sample type	Minimum sampling frequency	
Suspended, Colloidal or Settleable Solids	mL/L	--	--	Monitor	Grab	1/Day	
Taste and Odor-producing Substances	--	Monitor only	--	--	--	--	
Temperature	°C	--	--	32.2	Grab	1/Day	
Thallium	µg/L	--	--	0.49	Grab	1/Month	
TKN	µg/L	--	--	Monitor only	Grab	1/Month	
Turbidity	NTU	--	--	57	Grab	1/Month	
Zinc (Zn)	µg/L	--	--	85.62	Grab	1/Month	

Notes, Footnotes and Abbreviations

Dashes (--) indicate there are no effluent limitations or monitoring requirements for this parameter.

All limitations expressed in mass calculated from concentration-based limitations are calculated according to: mass (kg/day) = Flow (MGD) x concentration (mg/L) x 3.78 (kg/L)/(mg)(mgd)

(1) All flow measurements must achieve accuracy within the range of plus or minus (±) 10%.

(2) This average monthly effluent limitation is expressed as a geometric (or log) mean, based on a minimum of five samples collected for any 30-day period.

(3) For the maximum daily effluent limitation, no more than 20% of the single samples of fecal coliform collected during any 30-day period must exceed a MPN of 400 per 100 ml. All single samples must be reported as laboratory results attached to the DMR.

(4) The Permittee must at all times operate the plant to achieve the lowest possible residual chlorine while still complying with permit limits for bacterial indicator(s).

(5) A 3-year compliance schedule for TRC has been established. See Part II.B. *Interim Effluent Limitations Table* for interim limits and Part IV.B.4. *Compliance Schedules* for interim requirements.

(6) See Part IV.B.2. *Whole Effluent Toxicity Testing* for monitoring and reporting requirements for acute and chronic WET.

θ The effluent limitation for BOD₅ is based on the PRASA Mixing Zone Application for the Arecibo Regional Wastewaters Treatment Plant, after determining that there is a reasonable assurance that this limit will not cause violations to the water quality standard for Dissolved Oxygen for Class SC waters.

(α) The permittee shall implement a monthly monitoring program using the analytical method approved by EPA with the lowest possible detection level, in accordance with Rule 1306.2 (C) of the PRWQSR as amended, for one (1) year period, after which they will be conducted annually. The monitoring program shall commence no later than thirty (30) days after the EQB's written approval of the QAPP. The QAPP must be submitted for evaluation and approval of EQB not later than thirty (30) days after the EDP. The results of the monitoring program shall be submitted to EQB and EPA-Region 2 no later than sixty (60) days of completion of the one year monitoring program. Based on the evaluation of the results obtained, EQB will determine if an effluent limitation is necessary for this parameter. In such case the WQC will be reopened to include the applicable effluent limitation.

(Φ) The samples shall be analyzed using the method approved by EPA in letter of February 20, 2007.

γ See Special Condition 11.

δ See Special Condition 12.

A-2. Effluent Limitations and Monitoring Requirements at the Edge of the Mixing Zone

During the period beginning on EDP + 4 months and lasting through EDP + 16 months, the permittee shall perform monitoring at the mixing zone monitoring stations as specified below:

Parameter	Units	Effluent limitations			Monitoring requirements		Footnotes
		Average monthly	Average weekly	Maximum daily	Sample type	Minimum sampling frequency	
Color	Pt-Co	Shall not be altered by other than natural phenomena, except when it can be proven that such change in color is harmless to biota and aesthetically acceptable.			Grab	α	β
Copper (Cu)	$\mu\text{g/L}$	--	--	3.73	Grab	α	
Cyanide, Free (CN)	$\mu\text{g/L}$	--	--	1.0	Grab	α	$\gamma \ \phi$
Dissolved Oxygen (DO)	mg/L	Shall contain no less than 4.0.			Grab	α	
Nickel (Ni)	$\mu\text{g/L}$	--	--	8.28	Grab	α	
Nitrogen (NO ₃ , NO ₂ , NH ₃)	$\mu\text{g/L}$	--	--	5,000	Grab	α	
pH	SU	Shall always lie between 7.3 and 8.5			Grab	α	
Silver (Ag)	$\mu\text{g/L}$	--	--	2.24	Grab	α	
Sulfide (undissociated H ₂ S)	$\mu\text{g/L}$	--	--	2	Grab	α	δ
Surfactants (as Methylene Blue Activate Substances)	$\mu\text{g/L}$	--	--	500	Grab	α	
Thallium	$\mu\text{g/L}$	--	--	0.47	Grab	α	
Turbidity	NTU	--	--	10	Grab	α	

Notes, Footnotes and Abbreviations

- β The color at the edge of the mixing zone shall not exceed the color of the receiving water body (background sampling station).
- ϕ The samples shall be analyzed using the method approved by EPA in letter of February 20, 2007.
- γ See Special Condition 11.
- δ See Special Condition 12.
- α See Special Condition 21.

A-3. Monitoring Requirements at the Background Sampling Station

During the period beginning on EDP + 4 months and lasting through EDP + 16 months, the permittee shall perform monitoring at the mixing zone monitoring stations as specified below:

Parameter	Units	Monitoring requirements		Footnotes
		Sample type	Minimum sampling frequency	
Color	Pt-Co	Grab	α	
Copper (Cu)	μg/L	Grab	α	
Cyanide, Free (CN)	μg/L	Grab	α	γ φ
Dissolved Oxygen (DO)	mg/L	Grab	α	
Nickel (Ni)	μg/L	Grab	α	
Nitrogen (NO ₃ , NO ₂ , NH ₃)	μg/L	Grab	α	
pH	SU	Grab	α	
Silver (Ag)	μg/L	Grab	α	
Sulfide (undissociated H ₂ S)	μg/L	Grab	α	δ
Surfactants (as Methylene Blue Activate Substances)	μg/L	Grab	α	
Thallium	μg/L	Grab	α	
Turbidity	NTU	Grab	α	
Zinc	μg/L	Grab	α	

Notes, Footnotes and Abbreviations

- φ The samples shall be analyzed using the method approved by EPA in letter of February 20, 2007.
- γ See Special Condition 11.
- δ See Special Condition 12.
- α See Special Condition 21.

A-4. Interim Effluent Limitations—Outfall 001

During the period beginning on EDP and lasting as established in Special Condition 22.b, the permittee is authorized to discharge from outfall serial number 001 (primary treated wastewaters). Such discharge shall be limited and monitored by the permittee as specified below:

Interim Effluent Limitations Table

Parameter	Units	Effluent limitations		Monitoring requirements		Interim Effective Dates	Footnotes
		Average monthly	Maximum daily	Sample type	Minimum sampling frequency		
Enterococci	col100 mL	--	Monitor Only	Grab	1/Month	EDP + 36 months	*

A-5. Effluent Limitations and Monitoring Requirements

During the period beginning as established in Special Condition 22.b and lasting through EDP + 5 years the permittee is authorized to discharge from outfall serial number 001 (primary treated wastewaters). Such discharge shall be limited and monitored by the permittee as specified below:

Interim Effluent Limitations Table

Parameter	Units	Effluent limitations		Monitoring requirements		Interim Effective Dates	Footnotes
		Average monthly	Maximum daily	Sample type	Minimum sampling frequency		
Enterococci	col100 mL	The enterococci density in terms of geometric mean of at least 5 representative samples taken sequentially shall not exceed 35/100 mL. No single sample should exceed the upper confidence limit of 75% using 0.7 as the log standard deviation until sufficient site data exist to establish a site-specific log standard deviation		Grab	1/Month	Add Date	

Notes, Footnotes and Abbreviations

To comply with the monitoring requirements specified above, samples shall be taken at the outfall of discharges serial number 001.

* The geometric mean of a series of representative samples (at least five samples) of the water taken sequentially in a given instance.

B. Narrative Limitations

In accordance with 40 CFR 122.44(d), the permit establishes the following narrative limitations.

1. The waters of Puerto Rico must not contain any substance, attributable to the discharge at such concentration which, either alone or as result of synergistic effects with other substances, is toxic or produces undesirable physiological responses in humans, fish, or other fauna or flora.
2. The waters of Puerto Rico shall be substantially free from floating non-petroleum oils and greases as well as petroleum derived oil and greases.
3. The waters of Puerto Rico must not contain floating debris, scum, or other floating materials attributable to discharges in amounts sufficient to be unsightly or deleterious to the existing or designated uses of the water body.
4. Solids from wastewater sources must not cause deposition in or be deleterious to the existing or designated uses of the waters.
5. Taste and odor-producing substances must not be present in amounts that will interfere with primary contact recreation, or will render any undesirable taste or odor to edible aquatic life.

C. Monitoring Requirements

1. Effluent monitoring and analyses must be conducted in accordance with EPA test procedures approved under 40 CFR Part 136, *Guidelines Establishing Test Procedures for the Analysis of Pollutants Under the Clean Water Act*, as amended. For situations where there may be interference, refer to *Solutions to Analytical Chemistry Problems with Clean Water Act Methods* (EPA 821-R-07-002). For effluent analyses, the Permittee must use a *Minimum Level (ML)* that is lower than the effluent limitations described in Effluent Limitations Table of this permit. If all published MLs are higher than the effluent limitations, the Permittee must use the test method procedure with the lowest ML. The Permittee must ensure that the laboratory uses a standard calibration where the lowest standard point is equal to or less than the ML. Priority pollutant analysis for metals must measure *total metal*, except as provided under 40 CFR 122.45(c). EPA method 1631E must be used for mercury analysis. Priority pollutant analysis for benzene, ethylbenzene, toluene and xylene must employ either EPA Method 602 or 624. Effluent analysis for xylene must measure *total xylene*.
2. The regulations at 40 CFR 122.48 require that all NPDES permits specify monitoring and reporting requirements. All monitoring must be in accordance with Standard Condition 10. *Monitoring and records* in Attachment B of this permit.
3. Sampling point for Outfall 001 must be located immediately after the primary flow measuring device of the effluent of the treatment system.
4. The Permittee must develop and implement a quality assurance (QA) plan for laboratory analyses for effluent and/or receiving water monitoring.

D. Monitoring Locations

The Permittee must establish the following monitoring locations to demonstrate compliance with the effluent limitations and other requirements in this permit:

Monitoring Locations Table

Outfall	Monitoring location	Monitoring location description
--	INF-001	The sampling point for influent 001 shall be located at a point representative of the municipal water influent prior to mixing with sanitary wastewater from the facility.
001	EFF-001	The sampling point for discharge 001 shall be located immediately after the primary flow-measuring device of the effluent of the treatment system.

PART III. REPORTING REQUIREMENTS AND COMPLIANCE DETERMINATION

A. Reporting Requirements

1. **Standard Conditions.** The Permittee must comply with all Standard Conditions in section IV.A below and Attachment B of this permit related to monitoring, reporting, and recordkeeping.
2. **Monitoring data submission.** The Permittee must either submit monitoring data and other reports to EPA in hard copy form, or report electronically using NetDMR, a web-based tool that allows Permittees to electronically submit discharge monitoring reports (DMRs) and other required reports via a secure internet connection. Specific requirements regarding submittal of data and reports in hard copy form and for submittal using NetDMR are described below:
 - a. **Submittal of Reports in Hard Copy Form.** Hard copy DMR submittals must be submitted in accordance with Standard Condition *12.d. Monitoring reports* in Attachment B of this permit. The Permittee will report the results for all monitoring specified in this permit. The Permittee must submit monthly DMRs including the results of all required monitoring using EPA-approved test methods or other test methods specified in this permit as required by III.A.3. below. If the Permittee monitors any pollutant more frequently than required by the permit using test procedures approved under 40 CFR Part 136, or another method required for an industry-specific waste stream under 40 CFR subchapters N or O, the results of such monitoring must be included in the calculation and reporting of the data submitted in the DMR or sludge reporting form specified by EPA.
 - b. **Submittal of Reports Using NetDMR.** DMRs and reports submitted electronically to EPA must be done using NetDMR at <http://www.epa.gov/netdmr>. All reports required under the permit must be submitted to EPA as an electronic attachment to the DMR. Once a Permittee submits DMRs and reports using NetDMR, it is not required to submit hard copies of DMRs or other reports to EPA and the EQB. However, Permittees must continue to send hard copies of reports other than DMRs to the EQB until further notice from the EQB.
 - c. **Timing of submissions.** DMRs must be submitted to EPA no later than the 28th day of the month following the completed reporting period. Monitoring results must be summarized and reported on EPA DMR Form No. 3320-1, postmarked no later than the 28th day of the month following the completed monitoring period. The first report is due on **<DATE (i.e., 28th day of month after EDP)>**.

3. **Submission Requirements.** If submitting reports in hard copy form, DMRs must be signed and certified as required by Standard Condition 11. *Signatory requirements* in Attachment B of this permit. The Permittee must submit the original signed DMR to 3.a below and duplicate signed copies and all other reports required in this permit to 3.b below:
 - a. U.S. Environmental Protection Agency, Region 2
290 Broadway, 21st Floor
New York, NY 10007-1866
Attention: Compliance Assistance and Program Support Branch
 - b. Puerto Rico Environmental Quality Board
P.O. Box 11488
Santurce, PR 00910
Attention: Water Quality Bureau
4. **Analytical Determinations.** The Permittee must report the results on the DMR of analytical determinations for the presence of chemical constituents in a sample using the following reporting protocols:
 - a. Sample results greater than or equal to the ML must be reported as measured by the laboratory (i.e., the measured chemical concentration in the sample).
 - b. Sample results less than the ML must be reported as <ML, where the ML equals the ML reported by the laboratory.
 - c. Permittees are to instruct laboratories to establish calibration standards so that the ML value (or its equivalent if there is differential treatment of samples relative to calibration standards) is the lowest calibration standard. At no time is the Permittee to use analytical data derived from extrapolation beyond the lowest point of the calibration curve.
5. **Bacterial Monitoring.** For bacterial monitoring, the Permittee must report on the DMR the calculated geometric mean and the percentage of individual samples that exceeded the single-sample maximum criterion. The geometric mean must be calculated on the basis of five grab samples taken within the calendar month and as described in Attachment A. *Definitions* of this permit. The Permittee must report on an attachment to the DMR the analytical results of each of the five individual sample measurements, the calculated geometric means using these individual samples, and the percentage of individual samples that exceed the single sample maximum criterion.

B. Compliance Determination

Compliance with effluent limitations contained in this permit will be determined as specified below:

1. **General.** Compliance with effluent limitations for priority pollutants must be determined using sample reporting protocols defined in section III. A and Attachment A. *Definitions*.
2. **Average Monthly Discharge Limitation (AML).** If the average or, when applicable, the median of daily discharges that were measured in a calendar month exceeds the AML for a given parameter, this will represent a single violation, though the Permittee will be considered out of compliance for each day of that month for that parameter (e.g., resulting in 31 days of noncompliance in a 31-day month). If only a single sample is taken during the calendar month and the analytical result for that sample exceeds the AML, the Permittee will be considered out of compliance for that calendar month. The Permittee will be considered out of compliance for only the days when the discharge occurs. For any one calendar month during which no sample (daily discharge) is taken yet sampling is required, the Permittee will be considered out of compliance for that calendar month.

3. **Average Weekly Discharge Limitation (AWL).** If the average or, when applicable, the median of daily discharges over a calendar week exceeds the AWL for a given parameter, this will represent a single violation, though the Permittee will be considered out of compliance for each day of that week for that parameter, resulting in 7 days of noncompliance. If only a single sample is taken during the calendar week and the analytical result for that sample exceeds the AWL, the Permittee will be considered out of compliance for that calendar week. The Permittee will be considered out of compliance for only the days when the discharge occurs. For any one calendar week during which no sample (daily discharge) is taken yet sampling is required, the Permittee will be considered out of compliance for that calendar week.
4. **Maximum Daily Discharge Limitation (MDL).** If a daily discharge exceeds the MDL for a given parameter, the Permittee will be considered out of compliance for that parameter for that 1 day only in the reporting period. For any one day during which no sample is taken yet a sampling is required, the Permittee will be considered out of compliance for that day.

PART IV. STANDARD AND SPECIAL CONDITIONS

A. Standard Conditions

1. Standard Conditions Applicable to All Facilities

- a. The Permittee must comply with all Standard Conditions that apply to all NPDES permits in accordance with 40 CFR 122.41 (Attachment B of this permit), and additional conditions applicable to specific categories of facilities in accordance with 40 CFR 122.42.
- b. The Permittee must comply with the Reopener Clause in Standard Condition 17. *Reopener clause for toxic effluent limitations*, in Attachment B of this permit, which applies to all NPDES permits in accordance with 40 CFR 122.44(b). EPA reserves the right to revoke and reissue or modify this permit to establish effluent limitations, additional monitoring, schedules of compliance or other permit conditions based on new information, including any changes to the final Water Quality Certificate from EQB.

2. Standard Conditions Applicable to Specific Facilities—Notification Levels

All POTWs must provide adequate notice to EPA of all of the following [40 CFR 122.42(b)]:

- a. Any new introduction of pollutants into the POTW from an indirect discharger that would be subject to CWA sections 301 or 306 if it were directly discharging those pollutants [40 CFR 122.42(b)(1)].
- b. Any substantial change in the volume or character of pollutants being introduced into that POTW by a source introducing pollutants into the POTW at the time of issuance of this permit [40 CFR 122.42(b)(2)].
- c. Adequate notice must include information on the quality and quantity of effluent introduced into the POTW as well as any anticipated impact of the change on the quantity or quality of effluent to be discharged from the POTW [40 CFR 122.42(b)(3)].

B. Special Conditions

1. Special Conditions from the WQC

1. The flow of discharge 001 shall not exceed the limitation of 75,708 m³/day (20.0 MGD) as daily maximum. No increase in flow of discharge 001 shall be authorized without a recertification from the Puerto Rico Environmental Quality Board (EQB).^{1,4,6}
2. The permittee will provide to the EQB an inventory of all industries connected to the treatment system with its corresponding waste characteristics, in a term not greater than eighteen (18) months after the Effective Date of the NPDES Permit (EDP).

The permittee shall require to any industrial user of the treatment system, to comply with the requirements of Section 307 and 308 of the CWA, by requiring to each user to provide pretreatment to all industrial wastewater prior to the discharge to such system as determined by the Environmental Protection Agency (EPA) and EQB. The permittee shall require to each industrial user to comply with Section 308 of the CWA by requiring to each user to perform the necessary monitoring to verify compliance with the level of pretreatment required. Each

industrial user shall establish and maintain good records in relation to their pretreatment and shall allow the entry to their facilities to EPA and EQB personnel at any time for any appropriate inspection.⁸

3. The permittee shall provide written notice to the EQB and EPA of the following changes that may affect the treatment system:
 - a. Any new introduction of pollutants to the treatment system, not exclusively sanitary, coming from an industrial facility. If the industrial facility is an existing significant industrial user, shall notify only when the new introduction of pollutants, exceeds 1,000 gallons/day.
 - b. Any significant change in volume or character of pollutants being introduced into the treatment system by an existing source that may cause a variation in the quality of the effluent to be discharged.

Such notice shall include information of the quality and quantity of the effluent to be introduced into such treatment system and the anticipated impact of such change in quantity and/or quality of the effluent to be discharged from the system.⁸

4. No changes in the design or capacity of the treatment system will be permitted without the previous authorization of EQB.⁶
5. Prior to the construction of any additional treatment system or the modification of the existing one, the permittee shall obtain the approval from EQB of the engineering report, plans and specifications.⁶
6. The permittee shall install, maintain and operate all water pollution control equipment in such manner as to be in compliance with the applicable Rules and Regulations.^{1,4}
7. No toxic substances shall be discharged, in toxic concentrations, other than those allowed as specified in the NPDES permit. Those toxic substances included in the permit renewal application, but not regulated by the NPDES permit, shall not exceed the concentrations as specified in the applicable regulatory limitations.^{1,2}
8. The waters of Puerto Rico shall not contain any substance attributable to discharge 001, at such concentration which, either alone or as result of synergistic effects with other substances, is toxic or produces undesirable physiological responses in human, fish or other fauna or flora.²
9. The discharge 001 shall not cause the presence of oil sheen in the receiving water body.²
10. All sample collection, preservation, and analysis shall be carried out in accordance with the Title 40 of the Code of Federal Regulations (40 CFR), Part 136. A licensed chemist authorized to practice the profession in Puerto Rico shall certify all chemical analyses. All bacteriological tests shall be certified by a microbiologist or licensed medical technologist authorized to practice the profession in Puerto Rico.^{1,4}
11. The samples taken for the analysis of Cyanide shall be analyzed using the analytic method approved by the EPA with the lowest possible detection level, in accordance with Rule 1306.8 of the Puerto Rico Water Quality Standards Regulation (PRWQSR) as amended.⁴
12. The permittee shall use the EPA approved analytical method, with the lowest possible detection limit, in accordance with the 40 CFR, Part 136 for Sulfide (as S). Also, the permittee shall complete the calculations specified in Method 4500-S²-F, Calculation of Un-ionized Hydrogen Sulfide, of Standards Methods 18th Edition, 1992, to determine the concentration of undissociated H₂S. If the sample results of Dissolved Sulfide are below the detection limit of the EPA approved method established in the 40 CFR, Part 136, then, the concentration of undissociated H₂S shall be reported as "below detection limit".^{2,4}
13. The flow-measuring device for the discharge 001, shall be periodically calibrated and properly maintained. Calibration and maintenance records must be kept in compliance with the applicable Rules and Regulations.^{4,6}

14. The sampling point for discharge 001 shall be located immediately after the primary flow-measuring device of the effluent of the treatment system.
15. The sampling point for discharge 001 shall be labeled with an 18 inches per 12 inches (minimum dimension) sign that reads as follows:

"PUNTO DE MUESTREO PARA LA DESCARGA 001"

16. All water or wastewaters treatment facility, whether publicly or privately owned, must be operated by a person licensed by the Potable Water and Wastewaters Treatment Plants Operators Examining Board of the Commonwealth of Puerto Rico. ⁴
17. The solid wastes such as sludge, screenings and grit, generated due to the operation of the Arecibo Regional Wastewater Treatment Plant (ARWWTP), shall be:
 - a. Disposed in compliance with the applicable requirements established in the 40 CFR, Part 257. A semiannual report shall be submitted to EQB and EPA notifying the method or methods used to dispose the solid wastes generated in the facility. Also, copy of the approval or permit applicable to the disposal method used shall be submitted, if any.
 - b. Transported adequately in such way that access is not gained to any water body or soil. In the event of a spill of solid waste on land or into a water body, the permittee shall notify the Point Sources Permits Division of EQB's Water Quality Area in the following manners:
 1. By telephone communication within a term no longer than twenty four (24) hours after the spill (787-767-8073).
 2. By letter, within a term no longer than five (5) days after the spill.

These notifications shall include the following information:

- a) spill material,
- b) spill volume,
- c) measures taken to prevent the spill material to gain access to any water body.

This special condition does not relieve the permittee from its responsibility to obtain the corresponding permits from the EQB's Land Pollution Control Area and other state and federal agencies, if any. ^{4,7}

18. A log book must be kept for the material removed from the ARWWTP, such as sludge, screenings and grit, detailing the following items:
 - a. removed material, date and source of it;
 - b. approximate volume and weight;
 - c. method by which it is removed and transported;
 - d. final disposal and location;
 - e. person that performs the service.

A copy of the Non-Hazardous Solid Waste Collection and Transportation Services Permit issued by the authorized official from the EQB must be attached to the log book. ⁴

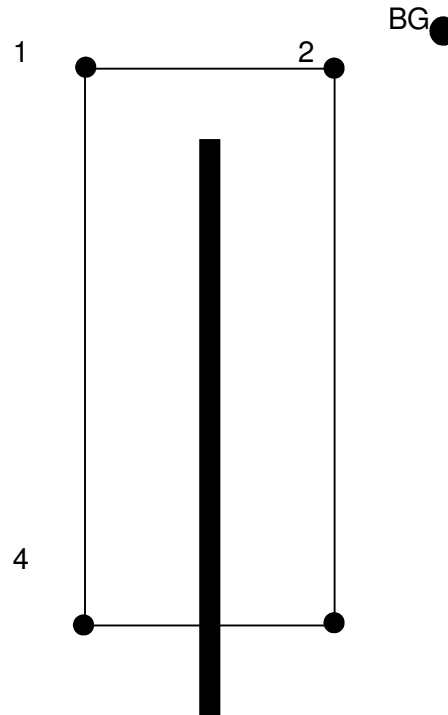
19. The sludge produced within the facility due to the operation of the treatment system shall be analyzed and all constituents shall be identified as required by "Standards for the Use or Disposal of Sewage Sludge" (40 CFR, Part 503). The sludge shall be disposed properly in such manner that water pollution or other adverse effects to surface waters or to ground waters do not occur. ^{4,7}
20. If any standard or prohibition to the sanitary sludge disposal is promulgated and said prohibition or standard is more stringent than any condition, restriction, prohibition or standard contained in the NPDES permit, such

permit shall be modified accordingly or revoked and reissued to be adjusted with regard to such prohibition or standard. ⁷

21. The EQB has defined and authorized an Interim Mixing Zone (IMZ) pursuant to Rule 1305 of the PRWQSR. ³

- a. The IMZ is delineated by the following points:

Arecibo RWWTP Mixing Zone



Geographic Coordinates*

Point 1	Lat. 18° 29' 25.64" Long. 66° 41' 26.03"
Point 2	Lat. 18° 29' 26.26" Long. 66° 41' 23.93"
Point 3	Lat. 18° 29' 19.75" Long. 66° 41' 21.81"
Point 4	Lat. 18° 29' 19.13" Long. 66° 41' 23.91"

*NAD 83 State Plane Coordinates

The ARWWTP outfall is a forty-eight (48) inch diameter pipeline that extends 3,769 ft from the shore. The diffuser is a linear type structure of six hundred and sixty-six (666) feet long and a constant diameter of forty-eight (48) inch. The outfall and diffuser are buried approximately 6.6 ft under the ocean floor. The diffuser has fifty-six (56) raisers equally spaced at twelve (12) feet, center to center. Each riser extends above the ocean floor to a T-section, except for the terminal structure that incorporates two (2) ports and an end gate. Each side of the riser has an orifice port of 2.5 inch diameter, except the most seaward riser on the terminal structure that has 3.5 inch diameter ports. The total distance from the first port to the last port is 660 ft. The angle of each port is zero degrees (0°) from the horizontal and the orientation of diffuser is perpendicular (90°) to the predominant currents. The depth of the orifices range from 74.1 to 89.9 feet, with an average depth of 84.3 feet.

A total of forty-one (41) open ports shall be opened, discharging at the seaward end of the diffuser. One port on the end structure and on each riser will be open, discharging in opposite directions.

- b. The mixing zone sampling stations shall be located at the four (4) points described in Part "a" of this special condition.
- c. The background sampling station shall be located one hundred (100) meters from Point 1 or Point 2 of the mixing zone, depending of the current direction at the time of sampling. The coordinates of the background stations are:

Geographic Coordinates*

Background Station Point 1	Lat. 18° 29' 24.67" Long. 66° 41' 29.28"
Background Station Point 2	Lat. 18° 29' 27.23" Long. 66° 41' 20.67"

- d. The permittee shall maintain records of the equipment used to situate at the mixing zone boundaries. Such records shall include the date when the equipment was obtained or leased, calibration date, serial number, model, etc.

To identify the location of the sampling points of the mixing zone and the background, the permittee shall use the procedure established in the EPA-QA/QC for 301(h) Document (Table D-1 Example ZID Boundary Stations Locations).

If the permittee determines to use another method to identify the sampling points of the mixing zone, the permittee shall, prior to the utilization of such method, obtain written approval from EQB.

- e. The IMZ is defined for the following parameters:

<u>PARAMETER</u>	<u>Daily Maximum Discharge Limitation at Outfall Serial Number 001</u>	<u>Daily Maximum Limitation at the Edge of the MZ</u>
Color (Pt-Co Units)	Monitoring Only	^Ω
Copper (Cu) (µg/L)	55.26	3.73
Cyanide, Free (CN) (µg/L)	10.2	1.0
Dissolved Oxygen (mg/L)	Monitoring Only	≥4.0
Nickel (Ni) (µg/L)	9.48	8.28
Nitrogen (NO ₂ , NO ₃ , NH ₃) (µg/L)	39,752	5,000
pH (SU)	6.0 – 9.0	7.3 – 8.5
Silver (Ag) (µg/L)	6.61	2.24
Sulfide (undissociated H ₂ S) (µg/L)	25	2
Surfactants (MBAS) (µg/L)	7,969	500
Thallium (Tl) (µg/L)	0.49	0.47
Turbidity (NTU)	57	10

- f. Monitoring samples for these parameters shall be taken at the sampling point 001, the background monitoring station and at the sampling points of the IMZ. The discharge shall comply with the water quality standards limitations for all the other substances at sampling point 001.
- g. The monitoring samples at the four (4) stations in the boundaries of the IMZ and the background monitoring station shall be taken at three (3) depths in each station: 10%, 50%, and 90% of the depth.
- h. The permittee shall conduct quarterly definitive acute and chronic toxicity tests using the organisms Mysidopsis bahia, Cyprinodon variegatus and Arbacia punctulata for the wastewater discharge identified as 001.
- i. Thirty (30) days from the EDP, the permittee shall submit, for evaluation and approval by EQB, a protocol to conduct such toxicity tests.

Such protocol shall include, but will not be limited to:

1. An identification of the organizations responsible for conducting the tests, including a full description of the laboratory capabilities and personnel expertise and the species to be tested.
 2. A detailed description of the methodology to be utilized in the conduct of the tests, including equipment, sample collection, dilution water and source of test organisms.
 3. A schematic diagram which depicts the effluent sampling location in relation to the wastewater treatment facility and discharge point 001.
- j. The toxicity tests shall be conducted quarterly beginning no later than one hundred eighty (180) days from the EDP, for a one (1) year period, after which the tests will be conducted annually.
- k. The toxicity tests shall be conducted according to the most recent editions of the following publications of the EPA:

^Ω The color at the edge of the mixing zone shall not exceed the color of the receiving water body (background monitoring station).

- 1) Methods for Measuring the Acute Toxicity of Effluents and Receiving Waters to Freshwater and Marine Organisms (EPA-821-R-02-012), Fifth Edition, October 2002, or the most recent edition of this publication, if such edition is available.
 - 2) Short Term Methods for Estimating the Chronic Toxicity of Effluents and Receiving Waters to Marine and Estuarine Organisms (EPA-821-R-02-014), Third Edition, October 2002, or the most recent edition of this publication, if such edition is available.
- l. The procedures, methods, techniques, conditions, etc., included in the above mentioned publications shall be followed at all times. If the permittee determines to use other procedures, methods, etc., because the permitte understands that:
- 1) by the nature or conditions of this case is impossible to follow such publications;
 - 2) other procedures, methods, etc., are adequate;
- then, the permittee shall, prior to the utilization of other procedures, methods, etc., obtain the written approval from the EPA and EQB.
- m. The effluent samples for the toxicity tests shall be used in or before 36 hours after being collected.
- n. A report on the toxicity tests conducted shall be submitted to the EQB, during the sixty (60) days period after the tests were conducted. This report shall be prepared according to the aforementioned publications of EPA.
- o. Based on the review of the test results, the EQB can require additional toxicity tests, including toxicity/treatability studies and can revoke the interim or final mixing zone authorization according with Rule 1305.14 of the PRWQSR.
- p. Solids from wastewater sources shall not cause deposition in, or be deleterious to the existing or designated uses of the receiving water body.
- q. The discharge shall not cause the growth or propagation of organisms that negatively disturb the ecological equilibrium in the areas adjacent to the mixing zone.
- r. The mixing zone shall be free of debris, scum, floating oil and any other substances that produce objectionable odors.
- s. The permittee shall maintain in good operating conditions the discharge system [discharge outfall (land and submarine), diffuser, ports, etc.]. At least once a year, the discharge system shall be inspected to determine if some repairs, replacing, etc., on the discharge system is required. A report of such inspections shall be submitted to EPA and EQB no later than sixty (60) days after the performance of the inspection.
- t. The EQB can require that the permittee conduct bioaccumulation studies, dye studies, water quality studies or any other pertinent studies. If the EQB require one or more of the aforementioned studies, the permittee will be notified to conduct such study(ies). One hundred and twenty (120) days after the notification of the EQB, the permittee shall submit, for evaluation and approval of the EQB, a protocol to conduct such study(ies). Sixty (60) days after the EQB approval, the permittee shall initiate such study(ies). Ninety (90) days after conducting such study(ies), the permittee shall submit a report that includes the results of such study(ies).
- u. The permittee shall implement a one year monitoring program to obtain the necessary data to validate the IMZ. The monitoring program shall consist of the sampling of the parameters included in Part "e" of this special condition to verify compliance with the applicable provisions of the PRWQSR and a dye study to validate the mathematical model used to determine the critical initial dilution and verify the behavior of the plume within the mixing zone. The monitoring program shall be conducted as follows:

1. The permittee shall conduct four (4) sampling events at the four (4) stations at the boundaries of the IMZ, at the background sampling station and at the sampling point of discharge 001, during two seasons (summer and winter). Two sampling events shall be conducted during each season.
2. The dye study shall be conducted twice, one event during each season at the same time as one of the sampling events of such season.
- v. The monitoring program shall commence ninety (90) days after the written approval of the corresponding Protocol and Quality Assurance Project Plan (QAPP). Such Protocol and QAPP shall be submitted to EQB ninety (90) days after the EDP.
- w. If the mathematical model is validated as established in the applicable provisions of the PRWQSR and in the Mixing Zone and Bioassays Guidelines, a final mixing zone authorization will be issued by EQB. Nevertheless, if the mathematical model is not validated, the EQB may revoke the IMZ authorization in accordance with Rule 1305.14 of the PRWQSR. In such case, the permittee must submit a compliance plan according to Rule 1305.16 of the PRWQSR.
- x. The EQB can allow that the permittee use alternative methods for the mixing zone validation if such methods comply with the applicable federal and state regulations or when new technology is developed that produce results technically and environmentally more reliable than those produced by the methods described in this special condition.
- y. The EQB will determine if the effluent limitations will be final or if it is necessary to reopen the WQC to modify (increase or decrease) the effluent limitation for one (1) or more of the aforementioned parameters after the revision of the results obtained in the studies required in this special condition.
- z. The authorization for the mixing zone will not be transferable and does not convey any property rights of any sort or any exclusive privileges, nor it authorizes any injury to persons or property or invasion of other private rights, or any infringement of Federal or State laws or regulations.

22. Interim Limit and Compliance Plan ⁴

- a. The permittee shall comply with the following interim and final limit for discharge 001 for the following parameter:

<u>Parameter</u>	<u>Interim Limit</u>	<u>Final Limit</u>
Enterococci (col/100 mL)	Monitoring Only	*

* The enterococci density in terms of geometric mean of at least five representative samples taken sequentially shall not exceed 35/100 mL. No single sample should exceed the upper confidence limit of 75% using 0.7 as the log standard deviation until sufficient site data exist to establish a site-specific log standard deviation.

- b. The interim limit will be effective during the period beginning on the EDP and lasting through EDP + 36 months, unless, following the terms and conditions of the approved study protocols, the permittee has requested a modification of the final limit of the WQC for this parameter because the results of the studies performed show that it is feasible to include other effluent limit or to define a mixing zone for this parameter in the WQC. In such case, the interim limit will stay in effect until the EQB and EPA issue a final determination regarding the requested modification. If it is determined that the WQC could be modified as requested, then the interim limit will continue in effect until the EQB and EPA issue a final modified WQC and final modified NPDES Permit, respectively. If the studies reflect that a modification to the WQC is not feasible, the permittee must comply with the final limit from EDP + 36 months + 1 day. During this time, the Arecibo Regional

Wastewater Treatment Plant shall comply with the Compliance Plan submitted on August 21, 2012, which was evaluated and approved by EQB. The schedule of the Compliance Plan is as follows:

Activity	Compliance Deadline
1. The permittee shall submit a Plan of Study (POS) to EQB. The POS shall define methods proposed to collect and evaluate all available information on key factors affecting bacterial concentrations in the effluent and the receiving water body. The implementation of the POS shall predict and verify bacteria and residual chlorine (TRC) concentrations in the effluent and receiving water body to determine whether a permit-approvable balance of TRC and bacteria can be maintained. The POS shall include standard operating procedures for field sample collection, the protocols to be used for laboratory and QA/QC techniques, laboratories to be used and detailed schedules for sampling and analysis. If it becomes evident that such a balance cannot be maintained, the POS shall be amended to include the concept of developing a mixing zone for Enterococcus.	EDP + 60 days
2. The permittee will initiate monthly sampling and analysis for Enterococcus and will submit quarterly reports to EQB and EPA.	EDP
3. EQB reviews and submits comments on the POS.	EDP + 90 days
4. The permittee submits a revised POS which adequately address comments.	EDP + 120 days
5. EQB approves the POS.	EDP + 150 days
6. If routine sampling indicates compliance, then no supplementary sampling will be done. Routine sampling will be continued for an additional 6 months, with submission of quarterly reports.	EDP + 180 days
If routine sampling does not indicate compliance with the applicable water quality standard of the PRWQSR, the permittee shall initiate the sampling required for the bacterial compliance plan. Based on the POS, laboratories and analysis techniques shall be selected. The first sampling and analysis event(s) and evaluation of results for compliance shall be done in a stepwise fashion appropriate to the parameters. Quarterly reports will be submitted to EQB and EPA.	
7. The permittee shall provide to EQB the results of the supplementary sampling, if initiated as described above, as a Technical Memorandum (TM), which shall provide recommendations. If the sampling shows compliance, the TM shall recommend one of two actions:	EDP + 365 days
i. Termination of study if compliance is demonstrated at the end of the pipe; routine effluent monitoring shall continue. No additional reporting will be provided other than the routine Discharge Monitoring Reports (DMRs).	

- ii. Continuation of the study as described in the POS. If bacteria concentrations exceed the applicable water quality standard in the effluent and appear to be above natural background levels in the receiving water body and cannot comply with PRWQSR within a mixing zone, the permittee will initiate a source identification and/or control plan.

8. If compliance is demonstrated with a mixing zone, and a mixing zone is approvable, the permittee anticipates that the mixing zone will have been approved by EQB by this date and that no further action will be required. EDP + 720 days

9. If background levels exceed the applicable water quality standard and the effluent levels appear to be less than natural background levels, the permittee shall submit a formal request that site-specific water quality standard apply. The request will be based on the natural background determination study. EDP + 810 days

If bacteria concentrations exceed the applicable water quality standard in the effluent and appear to be above natural background levels in the effluent and appear to be above natural background and cannot comply with PRWQSR within a mixing zone, the permittee anticipates that source identification and control measures will have been instituted. Any permit modifications or mixing zones required for compliance will be submitted.

10. If bacteria background levels exceed the applicable water quality standard and the effluent levels appear to be less than natural background levels, the permittee anticipates that site-specific water quality standard at natural background levels will be approved and that no further action will be required. EDP + 3 years

If bacteria concentrations exceed the applicable water quality standard in the effluent and appear to be above natural background levels and cannot comply with PRWQSR within a mixing zone, the permittee anticipates that source identification and control measures will have been successful, that any permit modifications or mixing zones required for compliance will have been approved, and that no further action will be required.

- c. Quarterly progress reports shall be submitted after EDP to EQB and EPA. The first progress report shall be submitted thirty (30) days after the EDP. If a time extension is necessary to comply with the approved schedule, a petition shall be submitted for EQB and EPA approval, in which it is demonstrated that certain conditions exist that make necessary an extension of such period. This petition shall be submitted thirty (30) days prior to the start of the requested time extension.
- d. EQB may revoke the approval of the Compliance Plan for any of the following reasons:
 1. The permittee has not revealed all the relevant facts in the request or has provided false representation of any of the relevant facts during the evaluation of such request.

2. Non-compliance with any applicable provisions of the Compliance Plan.
3. Changes in conditions, without due authorization from EQB, under which the Compliance Plan was approved.
4. There exists an imminent hazard to public health or the environment.

The EQB reserves the right to supervise and oversee the actions of the permittee concerning the performance of the Compliance Plan.

2. Best Management Practices and Pollution Prevention

a. Preventive Maintenance Plan (PMP) and Pollution Prevention

- 1) The Permittee must during the term of this permit operate the facility in accordance with the PMP approved by Federal Consent Decree Civil Action No 06-1624 (sec) for Wastewater Treatment Plant and in accordance with subsequent amendments to the plan.
- 2) **Purpose.** Through implementation of the PMP, the Permittee must prevent or minimize the generation and the potential for the release of pollutants from the facility to the waters of the United States through normal operations and ancillary activities.
- 3) **Requirements.** The PMP must be consistent with the the general guidance contained in the publication titled *Guidance Manual for Developing Best Management Practices (BMPs)* (EPA 833-B-93-004, 1993) or any subsequent revisions to the guidance document, and the approved Preventive Maintenance Program on Civil Actions No. 06-1624 (sec).
 - a) The PMP must establish specific BMPs to meet the objectives identified in the Objectives section above, addressing each component or system capable of generating or causing a release of significant amounts of pollutants, and identifying specific preventive or remedial measures to be implemented.
 - b) The PMP must establish specific BMPs or other measures that ensure that the following specific requirements are met:
 - i. Ensure proper management of solid and hazardous waste in accordance with regulations promulgated under the Resource Conservation and Recovery Act (RCRA). Management practices required under RCRA regulations must be referenced in the BMP plan.
 - ii. Reflect requirements for Spill Prevention, Control, and Countermeasure (SPCC) plans under CWA section 311 and 40 CFR Part 112 and may incorporate any part of such plans into the PMP by reference.
 - iii. Reflect requirements for stormwater control under CWA section 402(p) and the regulations at 40 CFR 122.26 and 122.44, and otherwise eliminate to the extent practicable, contamination of stormwater runoff.
- 4) **Documentation.** The Permittee must maintain a copy of the PMP at the facility and must make the plan available to EPA upon request. The copy of the PMP could be electronic.
- 5) **PMP Modification.** The Permittee must amend the PMP whenever there is a change in the facility or in the operation of the facility that materially increases the generation of pollutants or their release or potential release to the receiving waters. The Permittee must also amend the plan, as appropriate, when plant operations covered by the PMP change. Any such changes to the PMP must be consistent with the objectives and specific requirements listed above. All changes in the PMP must be reported to EPA in writing.
- 6) **Modification for Ineffectiveness.** If at any time the PMP proves to be ineffective in achieving the general objective of preventing and minimizing the generation of pollutants and their release and

potential release to the receiving waters and/or the specific requirements above, the permit and/or the PMP must be subject to modification to incorporate revised BMP requirements.

b. Stormwater Pollution Prevention Plan

The Permittee must develop and implement a stormwater pollution prevention (SWPP) plan in accordance with EPA Guide: Developing Your Stormwater Pollution Prevention Plan, February, 2009. The document can be found at: http://www.epa.gov/npdes/pubs/industrial_swppp_guide.pdf.

4. Compliance Schedules

In accordance with 40 CFR 122.47, this permit establishes a compliance schedule for **Enterococci** limited at Outfall No. 001 and requires the Permittee to meet the Schedule of Submittals below.

Schedule of Submittals

Outfall No.	Required Action	Due Date
001	Monitor Only	EDP plus 36 months.

5. Additional Special Conditions

a. Pretreatment Requirements

- 1) **Pretreatment Implementation.** The Permittee must implement an Industrial Pretreatment Program in accordance with the CWA section 402(b)(8), the General Pretreatment Regulations (40 CFR Part 403), and the legal authorities, policies, procedures, and financial provisions described in the Permittee's approved pretreatment program. The pretreatment program submission titled *Puerto Rico Aqueduct and Sewer Authority Pretreatment Program*, dated August 1985 was approved on September 26, 1985; the enforcement response plan was approved on May 30, 1995; and revised local limits were approved on January 30, 2006.

The Permittee's pretreatment program is hereby incorporated by reference and must be implemented in a manner consistent with the requirements in a) through g) below.

- a) The Permittee must develop and enforce local limits to implement the prohibitions listed in 40 CFR 403.5(a)(1) and (b). Each POTW with an approved pretreatment program must continue to develop these local limits as necessary and effectively enforce such limits.
- b) Written reports must be submitted according to the following schedule:

Pretreatment Reporting Table

Task	Due date
Conduct a Maximum Allowable Headworks Loading (MAHL) Analysis for pollutants listed in the Effluent Limitations Table, including an explanation of the removal capabilities of the facility. If the removal efficiencies vary from those provided in past local limit reports, a full justification of the rates and revised calculations for additional pass through requirements (water quality standards and sludge requirements) must also be provided.	<Enter EDP+90 days>
Develop a local limits report, including technical evaluation of local limits based on MAHL, domestic loading, and proposed allocation to nondomestic sources.	<Enter EDP+180 days>
Propose revisions to local limits (if indicated by technical evaluation) and implementation plan not to exceed EDP+365 days.	<Enter EDP+270 days>
Revise local limits (if indicated by technical evaluation) in permits issued to nondomestic users of the sewerage system.	<Enter EDP+365 days>

- c) The Permittee must control through a permit, order or similar means, the contribution to the POTW by each industrial user to ensure compliance with applicable Pretreatment Standards and Requirements. In the case of industrial users identified as significant, this control must be

achieved through permits or equivalent individual control mechanisms issued to each such user. Such control mechanisms must be enforceable and contain at a minimum a statement of duration (not to exceed 5 years), effluent limitations, sampling protocols, compliance schedule if appropriate, reporting requirements, and appropriate standard conditions.

- d) The Permittee must maintain and update industrial user information at a frequency adequate to ensure proper identification of industrial users subject to pretreatment standards, appropriate characterization of the nature of their discharges, and correct designation of industrial users.
- e) The Permittee must evaluate whether each significant industrial user (SIU) needs a plan to control slug discharges. For industrial users identified as significant before November 14, 2005, this evaluation must have been conducted at least once by October 14, 2006; additional SIUs must be evaluated within 1 year of being designated an SIU. If a slug control plan is needed, it must contain at least the minimum elements required in 40 CFR 403.8(f)(2)(vi) and the requirement to control slug discharges must be included in the user's permit.
- f) The Permittee must enforce and obtain remedies for noncompliance by any industrial users with applicable pretreatment standards and requirements.
- g) The Permittee must inspect and sample the effluent from each SIU at least once per year. This requirement is in addition to any industrial self-monitoring activities.

2) **Pretreatment Reporting.** All reports must be submitted to:

- a) U.S. Environmental Protection Agency, Region 2
290 Broadway, 24th Floor
New York, NY 10007-1866
Attention: Clean Water Division, NPDES Section
- b) U.S. Environmental Protection Agency, Region 2
City View Plaza II, Suite 7000
#48 RD. 165 Km 1.2
Guaynabo, PR 00968-8069
Attention: Municipal Water Program Branch

3) **Pretreatment Notification.** Pursuant to 40 CFR 403.5(e), whenever, on the basis of information provided to EPA, it has been determined that any source that contributes pollutants to the Permittee's treatment works in violation of CWA section 307(d), notification must be provided by EPA to the Permittee. Failure by the Permittee to commence an appropriate enforcement action against the industrial user within 30 days of this notification may result in an enforcement action against the source and Permittee by EPA.

4) **Pretreatment Sampling.** The Permittee must conduct all sampling specified in this permit and the approved pretreatment program.

5) **Pretreatment Annual Report.** The Permittee must provide to EPA an annual report that summarizes the Permittee's pretreatment program activities over the previous 12 months. The Permittee must also report on the pretreatment program activities of all participating agencies. This report must be submitted no later than December 1st of each year for the period covering September 1 through August 31 of the preceding year and must have the following content:

- a) An updated industrial survey, as appropriate.
- b) Results of any wastewater sampling conducted in accordance with the approved Pretreatment Program and General Pretreatment Regulations.
- c) Status of pretreatment program implementation including:
 - i. Any proposed substantial modifications to the pretreatment program as originally approved by EPA to include, for example, local limitations, special agreements, and staffing and funding updates.
 - ii. Any interference, upset or permit violations experienced at any of the POTW directly attributable to industrial users.

- iii. Listing of SIUs issued Industrial Discharge Permits.
 - iv. Listing of SIUs inspected and/or monitored during the previous reporting period and summary of results.
 - v. Listing of SIUs planned for inspection and/or monitoring for the next reporting period along with inspection frequencies.
 - vi. Listing of SIUs notified of promulgated pretreatment standards, local standards or any applicable requirements under CWA section 405 and Subtitle C and D of RCRA, as required in 40 CFR 403.8(f)(2)(iii).
 - vii. Listing of SIUs notified of promulgated pretreatment standards or applicable local standards that are on compliance schedules. The listing should include for each facility the final date of compliance.
 - viii. Planned changes in the implementation program.
- d) Status of enforcement activities including the following:
- i. Listing of categorical industrial users, who failed to submit baseline reports or any other reports as specified in 40 CFR 403.12 and in section 05 of the Puerto Rico Aqueduct & Sewer Authority Rules and Regulations for the Supply of Water and Sewer Service.
 - ii. Listing of any SIUs not complying with federal or local pretreatment standards as of the final compliance date.
 - iii. Summary of enforcement activities taken or planned against industrial users that are in significant noncompliance. The Permittee must publish, at least annually in the daily newspaper published in each municipality where a treatment plant is located or in a newspaper of general circulation throughout Puerto Rico or in both, a list of SIUs which, during the previous 12 months were in significant noncompliance with the applicable pretreatment standards or requirements. Significant noncompliance must be determined on the basis of the more stringent of either criteria established at 40 CFR 403.8(f)(2)(viii) or criteria established in the Permittee's approved pretreatment program.
- 6) **Pretreatment Sludge Disposal Notification.** The Permittee must notify EPA no later than 60 days before any major proposed changes in its existing sludge disposal practices.
- 7) **Pretreatment Responsibilities.** The Permittee must provide adequate staff, equipment, and support capabilities to carry out the elements of the pretreatment program.
- 8) **Pretreatment Additional Notification.** The Permittee must provide notice to EPA of the following:
- a) Any new introduction of pollutants into the POTW from an indirect discharger which would be subject to CWA section 301 or 306 if it were directly discharging those pollutants.
 - b) Any substantial change in the volume or character of pollutants being introduced into that POTW by a source introducing pollutants into the POTW at the time of issuance of the permit.
 - c) For purposes of this paragraph, adequate notice must include information on both the quality and quantity of effluent introduced into the POTW and any anticipated impact of the change on the quantity or quality of effluent to be discharged from the POTW.
- 9) **Required for a 301(h) Facility:** For a toxic pollutant introduced into the applicant's treatment works by an industrial discharger for which there is no applicable categorical pretreatment standard for the toxic pollutant, the Permittee shall demonstrate to EPA annually during the term of the permit through continued monitoring and appropriate technical review that a local limit is not necessary, and, where appropriate, require industrial management practices plans and other pollution prevention activities to reduce or control the discharge of each such pollutant by industrial dischargers to the POTW. Such annual analysis shall be submitted by December 1st and a copy will be provided to EPA Region 2, Clean Water Division, NPDES Section, 290 Broadway, NY, NY 10007. If such monitoring and technical review of data indicates that a local limit is needed, the POTW shall establish and implement a local limit by March 31st of the year following the analysis.

b. Biosolids (Sewage Sludge) Requirements

1) General Biosolids Requirements

- a) All biosolids generated by the Permittee must be used or disposed of in compliance with the applicable portions of the following:
 - i. 40 CFR Part 503—for biosolids that are land applied, placed in a surface disposal site (dedicated land disposal site, monofill, or sludge-only parcel at a municipal landfill), or incinerated.
 - ii. 40 CFR Part 258—for biosolids disposed of in a municipal solid waste landfill (with other material).
 - iii. 40 CFR Part 257—for all biosolids use and disposal practices not covered under 40 CFR Parts 258 or 503.
- b) The regulation at 40 CFR Part 503, Subpart B (land application) sets requirements for biosolids that are applied for the purpose of enhancing plant growth or for land reclamation. The regulation at 40 CFR Part 503, Subpart C (surface disposal) sets requirements for biosolids that are placed on the land for the purpose of disposal, and 40 CFR Part 503, Subpart E, sets requirements for biosolids incinerated in a biosolids incinerator.
- c) The Permittee must be responsible for assuring that all biosolids produced at its facility are used or disposed of in accordance with these rules, whether the Permittee uses or disposes of the biosolids itself or transfers the biosolids to another party for further treatment, use, or disposal. The Permittee must be responsible for informing subsequent preparers, applicers, and disposers of the requirements that they must meet under these rules.
- d) The Permittee must assure that haulers transporting biosolids off site for treatment, storage, use, or disposal take all necessary measures to keep the biosolids contained. All haulers must have spill cleanup procedures. If a spill of biosolids on land or into a body of water occurs, the Permittee must notify the Point Sources Permits Division of the EQB's Water Quality Area in the following manner:
 - i. By telephone communication within a term no longer than 24 hours after the spill; (787) 767-8073.
 - ii. By letter, within a term no longer than 5 days after the spill, which must include the spill material, spill volume, and measures taken to prevent the spill material to gain access to any body of water. This special condition does not relieve the Permittee from its responsibility to obtain the corresponding permits from EQB's Solid Wastes Program and other state and federal agencies, if any.

2) Biosolids Monitoring Requirements

- a) The 40 CFR Part 503 requirements apply differently depending on the use or disposal practice followed by the Permittee and depends on the quality of the biosolids produced by the facility.
- b) Biosolids must be monitored for pollutant concentrations, pathogen reduction and vector attraction (land application and surface disposal) at the following frequency. This frequency is based on the volume of biosolids generated at the facility in dry metric tons per year:
 - i. less than 290 1/year
 - ii. 290 to less than 1,500 1/quarter (4/year)
 - iii. 1,500 to less than 15,000 1/60 days (6/year)
 - iv. equal to or greater than 15,000 1/month (12/year)

3) Biosolids Reporting Requirements

- a) **Annual Biosolids Report.** By February 19 of each year, the Permittee must submit an annual report covering information and data collected during the previous calendar year to EPA and EQB at the address in Part d) of this section below. This report must contain the following:
- i. Amount of sludge generated, in dry metric tons.
 - ii. Use or disposal practices.
 - iii. Amount of sludge that goes to each use or disposal practice (amount of sludge that goes to each use or disposal site, in dry metric tons).
 - iv. Name and address of the preparer or the person who receives sludge next (name and address of each preparer or person who receives sludge next), if applicable.
 - v. Name and address of the land applier and owner/operator of the surface disposal site, if different from the generator.
 - vi. Analytical results from monitoring pollutant concentrations in sewage sludge which should include results of all analyses performed during the reporting period using the prescribed method(s) in milligrams per kilograms (mg/kg) dry weight. Reports should also indicate which analytical methods were used, how frequently sludge was monitored, and the types of samples collected. Preparers may have to report additional information regarding pollutants if they beneficially use or dispose of the sludge themselves.
 - vii. A certification and description of how the pathogen reduction requirements were met, including a detailed description of the pathogen treatment process that specifies the type of process used, standard operating procedures, and a schematic diagram. All pathogen density laboratory results (such as fecal coliform or salmonella), if monitored for must comply with pathogen reduction requirements.
 - viii. A description of how one of the vector attraction reduction requirements was met if one of the sludge processing options was used (Options 1-8, 40 CFR 503.33(b)(1) - (b)(8)) and a certification that the vector attraction reduction requirements were met.
 - ix. A listing of all relevant environmental (federal, state, or local) permits or construction approvals applied for or received.
- b) **Certification Statement.** The incinerator owner/operator of the sewage sludge incinerator should submit the signed certification statement (described in section H, page 17 of the *THC Continuous Emission Monitoring Guidance for Part 503 Sewage Sludge Incinerators*) as part of the Annual Biosolids Report. Specifically, the owner/operator in conjunction with the CEM manufacturer, if appropriate, should certify that the THC/CO CEM system is installed, operated, and maintained pursuant to the manufacturer's written instructions and recommendations, meets performance specification criteria, and is suitable for compliance evaluation purposes. The report must include the information in 40 CFR 503.47(b) through 40 CFR 503.47(h). The incinerator owner/operator of the sewage sludge incinerator should submit the 40 CFR Part 503 site-specific metals limits that are required to be determined as per 40 CFR 503.43.
- c) **MSW Landfill Disposal.** Preparers who send their sludge to a Municipal Solid Waste (MSW) landfill are required to submit the information indicated in 1) through 3) above, the name and address of each MSW landfill, in addition to submitting documentation that sludge quality is in compliance with 40 CFR Part 258 requirements (sludge is non-hazardous and passes the paint filter test).
- d) **Biosolids Reporting.** All reports must be submitted to:
- i. U.S. Environmental Protection Agency, Region 2
290 Broadway, 20th Floor
New York, NY 10007-1866
Attention: Water Compliance Branch

- ii. Puerto Rico Environmental Quality Board
P.O. Box 11488
Santurce, PR 00910
Attention: Water Quality Bureau

e) **Biosolids Reporting Schedule.** All reports must be submitted according to the following table:

Biosolids Reporting Table

Task	Due date
If a spill of biosolids on land or into a body of water occurs	Telephone <24 hours after the spill and Letter <5 days after the spill
Annual Biosolids Report	February 19th of each year

ATTACHMENT A: DEFINITIONS

Acute Toxicity Test means any toxicity test designed to determine the concentration in which a response to a stimulus, such as a total effluent, specific substance or combinations of these, has sufficient severity to induce an adverse effect on a group of test organisms during a period of 96 hours or less; even if said effect is not necessarily the death of the organisms.

Acute Toxicity Unit (TU_a) means the reciprocal of the effluent concentration that causes 50 percent of the organisms to die in an acute toxicity test or induce a response halfway between the base line and maximum as defined by the following equation:

$$TU_a = 100 / (LC_{50})$$

(The LC_{50} should be expressed in terms of the percent of effluent in the dilution water.)

Average Monthly Discharge Limitation (AML) means the highest allowable average of daily discharges over a calendar month, calculated as the sum of all daily discharges measured during a calendar month divided by the number of daily discharges measured during that month. [40 CFR 122.2]

Average Weekly Discharge Limitation (AWL) means the highest allowable average of daily discharges over a calendar week (Sunday through Saturday), calculated as the sum of all daily discharges measured during a calendar week divided by the number of daily discharges measured during that week. [40 CFR 122.2]

Best Management Practices (BMP) means the most effective practicable means of preventing or reducing the amount of pollution generated by nonpoint and point sources to a level more compatible to the water quality goals, including, but not limited to, structural and non-structural controls and operating and maintenance procedures. [40 CFR 122.2]

Biosolids means non-hazardous sewage sludge, as defined in 40 CFR Part 503.9. Sewage sludge that is hazardous, as defined in 40 CFR Part 261, must be disposed of in accordance with Resource Conservation and Recovery Act.

Bypass means the intentional diversion of waste streams from any portion of a treatment facility as discussed in 13. Bypass of Attachment B of this permit. [40 CFR 122.41(m)]

Composite means a combination of individual (or continuously taken) samples of at least 100 milliliters, collected at periodic intervals over the entire discharge day. The composite must be flow proportional; either the time interval between each sample must be proportional to the discharge flow (i.e. samples of equal volume taken every "X" gallons of flow) or the volume of each sample must be proportional to the discharge flow (i.e. a proportional volume sample taken at constant time intervals). Samples may be collected manually or automatically. For a continuous discharge, a minimum of 24 individual samples shall be collected and combined to constitute a 24-hour composite sample. For intermittent discharges of less than four (4) hours duration, samples shall be taken at a minimum of 15 minute intervals. For intermittent discharges of more than four (4) hours duration, samples shall be taken at a minimum of 30 minute intervals

Chronic Toxicity Test means any toxicity test designed to determine the concentration in which a response to a stimulus, such as a total effluent, a specific substance, or combination of these, has sufficient severity to induce a long-term adverse effect on a group of test organisms. A chronic effect could be lethality, reduction of growth rate, reduction of reproduction rate, etc.

Chronic Toxicity Unit (TU_c) means the reciprocal of the effluent concentration that causes no observable effect on the test organisms by the end of the chronic exposure period obtained during a chronic toxicity test as defined by the following equation:

$$TU_c = 100 / NOEC$$

(The NOEC value should be expressed in terms of the percent of effluent in the dilution water.)

Critical Initial Dilution means the minimum dilution to be determined by means of the use of a mathematical model to be approved by EQB, and according to the procedures described in the *Mixing Zone and Bioassay Guidelines*, approved by EQB.

Daily Discharge is defined as either (1) the total mass of the constituent discharged over the calendar day (12:00 a.m. through 11:59 p.m.) or any 24-hour period that reasonably represents a calendar day for purposes of sampling (as specified in the permit), for a constituent with limitations expressed in units of mass; or (2) the unweighted arithmetic mean measurement of the constituent over the day for a constituent with limitations expressed in other units of measurement (e.g., concentration).

The daily discharge may be determined by the analytical results of a composite sample taken over the course of one day (a calendar day or other 24-hour period defined as a day) or by the arithmetic mean of analytical results from one or more grab samples taken over the course of the day. For composite sampling, if 1 day is defined as a 24-hour period other than a calendar day, the analytical result for the 24-hour period will be considered as the result for the calendar day in which the 24-hour period ends. [40 CFR 122.2]

Director means the *Regional Administrator* or the *State Director*, as the context requires, or an authorized representative. Until Puerto Rico has an approved state program authorized by EPA under 40 CFR Part 123, *Director* means the Regional Administrator. Following authorization, *Director* means the State Director. Even in such circumstances, EPA may retain authority to take certain action (see, for example, 40 CFR 123.1(d), 45 *Federal Register* 14178, April 1, 1983, on the retention of jurisdiction over permits EPA issued before program approval). If any condition of this permit requires the reporting of information or other actions to both the Regional Administrator and the State Director, regardless of who has permit issuing authority, the terms *Regional Administrator* and *State Director* will be used in place of *Director*. [40 CFR 122.2]

Discharge Monitoring Report (DMR) means EPA uniform national form, including any subsequent additions, revisions, or modifications, for the reporting of self-monitoring results by the Permittee. [40 CFR 122.2]

Geometric Mean means the n th root of the product of n numbers.

Grab means an individual sample collected in less than 15 minutes.

ICIS means EPA's Integrated Compliance Information System that provides web access to enforcement and compliance assurance data to EPA and state agencies.

Inhibition Concentration 25 (IC₂₅) means a point estimate of the effluent concentration that would cause a 25-percent reduction in a non-lethal (e.g., reproduction, growth) or lethal (mortality) biological measurement.

Lethal Concentration (LC₅₀) means the concentration of effluent, specific substances or combination of these that is lethal to 50 percent of test organisms exposed during a specific period in a toxicity test.

Lowest Observable Effects Concentration (LOEC) means the lowest concentration of an effluent or toxicant that results in adverse effects on the test organisms. That is, where the values for the observed endpoints are statistically different from the control.

Maximum Daily Discharge Limitation (MDL) means the highest allowable daily discharge of a pollutant, over a calendar day (or 24-hour period). For pollutants with limitations expressed in units of mass, the daily discharge is calculated as the total mass of the pollutant discharged over the day. For pollutants with limitations expressed in other units of measurement, the daily discharge is calculated as the arithmetic mean measurement of the pollutant over the day.

Median is the middle measurement in a set of data. The median of a set of data is found by first arranging the measurements in order of magnitude (either increasing or decreasing order). If the number of measurements (n) is odd, the median = $X_{(n+1)/2}$. If n is even, the median = $(X_{n/2} + X_{(n/2)+1})/2$ (i.e., the midpoint between the $n/2$ and $n/2+1$).

Minimum Level (ML) is the concentration at which the entire analytical system must give a recognizable signal and acceptable calibration point. The ML is the concentration in a sample that is equivalent to the concentration of the lowest calibration standard analyzed by a specific analytical procedure, assuming that all the method-specified sample weights, volumes, and processing steps have been followed.

Mixing Zone is a limited volume of receiving water that is allocated for mixing with a wastewater discharge where water quality criteria can be exceeded without causing adverse effects on the overall water body.

Monthly means one day each month (the same day each month) and a normal operating day (e.g., the 2nd Tuesday of each month).

No Observed Effect Concentration (NOEC) means the highest tested concentration of an effluent or a toxicant at which no adverse effects are observed on the aquatic test organisms at a specific time of observation.

Not Detected (ND) are those sample results less than the ML.

Regional Administrator means the Regional Administrator of EPA Region 2 or the authorized representative of the Regional Administrator.

Severe property damage means substantial physical damage to property, damage to the treatment facilities which causes them to become inoperable, or substantial and permanent loss of natural resources which can reasonably be expected to occur in the absence of a bypass. Severe property damage does not mean economic loss caused by delays in production.

Toxic pollutant means any of the pollutants listed in 40 CFR 401.15 (45 *Federal Register* 44503, July 30, 1979) and any modification to that list in accordance with CWA section 307(a)(1). [40 CFR 122.2]

Toxicity Reduction Evaluation (TRE) is a study conducted in a step-wise process designed to identify the causative agents of effluent or ambient toxicity, isolate the sources of toxicity, evaluate the effectiveness of toxicity control options, and then confirm the reduction in toxicity. The first steps of the TRE consist of collecting data relevant to the toxicity, including additional toxicity testing, and evaluating facility operations and maintenance practices, and best management practices. A Toxicity Identification Evaluation (TIE) may be required as part of the TRE, if appropriate. (A TIE is a set of procedures to identify the specific chemical(s) responsible for toxicity. These procedures are performed in three phases (characterization, identification, and confirmation) using aquatic organism toxicity tests.)

Total Maximum Daily Loads (TMDLs) are calculations of the maximum amount of a pollutant that a water body can receive and still safely meet water quality standards. TMDLs are the sum of the individual wasteload allocations for point sources and load allocations for nonpoint sources and natural background. [40 CFR 130.2(i)]

Upset is an exceptional incident in which there is unintentional and temporary noncompliance with technology-based permit effluent limitations because of factors beyond the reasonable control of the Permittee. An upset does not include noncompliance to the extent caused by operational error, improperly designed treatment facilities, inadequate treatment facilities, lack of preventive maintenance, or careless or improper operation as discussed in 14. Upset of Attachment B of this permit. [40 CFR 122.41(n)]

Waters of Puerto Rico means all coastal waters, surface waters, estuarine waters, ground waters and wetland as defined in Puerto Rico Water Quality Standards Regulations, as amended.

Weekly means every seventh day (the same day of each week) and a normal operating day

ATTACHMENT B: STANDARD CONDITIONS

General Conditions language in this attachment for sections 1 through 14, and 17 is based on the *Code of Federal Regulations* (CFR) published on **July 1, 2014**. Reference to provisions in the *United States Code* (U.S.C.) is based on the date of permit issuance.

Table of Regulatory References for General Conditions

Section	Section Title	Reference
1.	Duty to comply	40 CFR 122.41(a)
2.	Duty to reapply	40 CFR 122.41(b)
3.	Need to halt or reduce not a defense	40 CFR 122.41(c)
4.	Duty to mitigate	40 CFR 122.41(d)
5.	Proper operation and maintenance	40 CFR 122.41(e)
6.	Permit actions	40 CFR 122.41(f)
7.	Property rights	40 CFR 122.41(g)
8.	Duty to provide information	40 CFR 122.41(h)
9.	Inspection and entry	40 CFR 122.41(i)
10.	Monitoring and records	40 CFR 122.41(j)
11.	Signatory requirements	40 CFR 122.41(k)
12.	Reporting requirements	40 CFR 122.41(l)
13.	Bypass	40 CFR 122.41(m)
14.	Upset	40 CFR 122.41(n)
15.	Removed substances	33 U.S.C. 1311
16.	Oil and hazardous substance liability	33 U.S.C. 1321
17.	Reopener clause for toxic effluent limitations	40 CFR 122.44(b)(1)
18.	State laws	33 U.S.C. 1370
19.	Availability of information	33 U.S.C. 1318
20.	Severability	-

1. Duty to Comply [40 CFR 122.41(a)].

- a. The Permittee shall comply with all conditions of this permit. Any permit noncompliance constitutes a violation of the Clean Water Act and is grounds for enforcement action; for permit termination, revocation and reissuance, or modification; or for denial of a permit renewal application.
- b. The Permittee shall comply with effluent standards or prohibitions established under section 307(a) of the Clean Water Act for toxic pollutants and with standards for sewage sludge use or disposal established under section 405(d) of the Clean Water Act within the time provided in the regulations that establish these standards or prohibitions or standards for sewage sludge use or disposal, even if the permit has not yet been modified to incorporate the requirement.
- c. The Clean Water Act provides that any person who violates sections 301, 302, 306, 307, 308, 318 or 405 of the Clean Water Act, or any permit condition or limitation implementing any such sections in a permit issued under section 402, or any requirement imposed in a pretreatment program approved under sections 402(a)(3) or 402(b)(8) of the Clean Water Act, is subject to a civil penalty not to exceed \$25,000 per day for each violation (\$37,500 as adjusted by 40 CFR Part 19).
- d. The Clean Water Act provides that any person who negligently violates sections 301, 302, 306, 307, 308, 318, or 405 of the Clean Water Act, or any permit condition or limitation implementing any such sections in a permit issued under section 402 of the Clean Water Act, or any requirement imposed in a pretreatment program approved under section 402(a)(3) or 402(b)(8) of the Clean Water Act, is subject to criminal penalties of not less than \$2,500 nor more than \$25,000 per day of violation, or imprisonment of

not more than 1 year, or both. In the case of a second or subsequent conviction for a negligent violation of the Clean Water Act, a person shall be subject to criminal penalties of not more than \$50,000 per day of violation, or by imprisonment of not more than 2 years, or both.

- e. The Clean Water Act provides that any person who knowingly violates sections 301, 302, 306, 307, 308, 318, or 405 of the Clean Water Act, or any permit condition or limitation implementing any of such sections in a permit issued under section 402 of the Clean Water Act, or any requirement imposed in a pretreatment program approved under section 402(a)(3) or 402(b)(8) of the Clean Water Act, is subject to criminal penalties of not less than \$5,000 nor more than \$50,000 per day of violation, or imprisonment for not more than 3 years, or both. In the case of a second or subsequent conviction for a knowing violation of the Clean Water Act, a person shall be subject to criminal penalties of not more than \$100,000 per day of violation, or imprisonment of not more than 6 years, or both.
 - f. Any person who knowingly violates sections 301, 302, 303, 306, 307, 308, 318 or 405 of the Clean Water Act, or any permit condition or limitation implementing any of such sections in a permit issued under section 402 of the Clean Water Act, and who knows at that time that he thereby places another person in imminent danger of death or serious bodily injury, shall, upon conviction, be subject to a fine of not more than \$250,000 or imprisonment of not more than 15 years, or both. A person which is an organization, as defined at 33 U.S.C. 309(c)(3)(B)(iii), shall, upon conviction be subject to a fine of not more than \$1,000,000. In the case of a second or subsequent conviction for a knowing endangerment violation of the Clean Water Act, the maximum punishment shall be doubled with respect to both fine and imprisonment.
 - g. Any person who knowingly makes any false material statement, representation, or certification in any application, record, report, plan, or other document filed or required to be maintained under the Clean Water Act or who knowingly falsifies, tampers with, or renders inaccurate any monitoring device or method required to be maintained under this chapter, shall upon conviction, be punished by a fine of not more than \$10,000, or imprisonment for not more than 2 years, or both. In the case of a second or subsequent conviction, under this paragraph, punishment shall be by a fine of not more than \$20,000 per day of violation, or by imprisonment of not more than 4 years, or both.
 - h. Any person may be assessed an administrative penalty by the Administrator for violating sections 301, 302, 306, 307, 308, 318 or 405 of this Act, or any permit condition or limitation implementing any of such sections in a permit issued under section 402 of this Act. Administrative penalties for Class I violations are not to exceed \$10,000 per violation (\$16,000 as adjusted by 40 CFR Part 19), with the maximum amount of any Class I penalty assessed not to exceed \$25,000 (\$37,500 as adjusted by 40 CFR Part 19). Penalties for Class II violations are not to exceed \$10,000 per day for each day during which the violation continues (\$16,000 as adjusted by 40 CFR Part 19), with the maximum amount of any Class II penalty not to exceed \$125,000 (\$177,500 as adjusted by 40 CFR Part 19).
2. Duty to Reapply [40 CFR 122.41(b)]. This permit and the authorization to discharge shall terminate on the expiration date indicated on the first page. In order to receive authorization to discharge after the expiration date of this permit, the Permittee shall apply for and obtain a new permit. If the permit issuing authority remains the EPA, the Permittee shall complete, sign, and submit an application to the Director no later than 180 days before the expiration date. All applications must be submitted to:

Joan Leary Matthews, Director
Clean Water Division
U.S. Environmental Protection Agency, Region 2
290 Broadway, 24th Floor
New York, NY 10007-1866
Attention: Clean Water Regulatory Branch
 3. Need to Halt or Reduce not a Defense [40 CFR 122.41(c)]. It shall not be a defense for a Permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this permit.
 4. Duty to Mitigate [40 CFR 122.41(d)]. The Permittee shall take all reasonable steps to minimize or prevent any discharge or sludge use or disposal in violation of this permit which has a reasonable likelihood of adversely affecting human health or the environment.

5. Proper operation and maintenance [40 CFR 122.41(e)]. The Permittee shall at all times properly operate and maintain all facilities and systems of treatment and control (and related appurtenances) which are installed or used by the Permittee to achieve compliance with the conditions of this permit. Proper operation and maintenance also includes adequate laboratory controls and appropriate quality assurance procedures. This provision requires the operation of back up or auxiliary facilities or similar systems which are installed by a Permittee only when the operation is necessary to achieve compliance with the conditions of the permit.
6. Permit actions [40 CFR 122.41(f)]. This permit may be modified, revoked and reissued, or terminated during its term pursuant to 40 CFR Part 122, Subpart D. The filing of a request by the Permittee for a permit modification, revocation and reissuance, or termination, or a notification of planned changes or anticipated noncompliance does not stay any permit condition.
7. Property rights [40 CFR 122.41(g)]. This permit does not convey any property rights of any sort, or any exclusive privileges.
8. Duty to provide information [40 CFR 122.41(h)]. The Permittee shall furnish to the Director, within a reasonable time, any information which the Director may request to determine whether cause exists for modifying, revoking and reissuing, or terminating this permit, or to determine compliance with this permit. The Permittee shall also furnish to the Director, upon request, copies of records required to be kept by this permit.
9. Inspection and Entry [40 CFR 122.41(i)]. The Permittee shall allow the Director, or an authorized representative (including an authorized contractor acting as a representative of the Administrator), upon presentation of credentials and other documents as may be required by law, to:
 - a. Enter upon the Permittee's premises where a regulated facility or activity is located or conducted, or where records must be kept under the conditions of this permit;
 - b. Have access to and copy, at reasonable times, any records that must be kept under the conditions of this permit;
 - c. Inspect at reasonable times any facilities, equipment (including monitoring and control equipment), practices, or operations regulated or required under this permit; and
 - d. Sample or monitor at reasonable times, for the purposes of assuring permit compliance or as otherwise authorized by the Clean Water Act, any substances or parameters at any location.
10. Monitoring and records [40 CFR 122.41(j)].
 - a. Samples and measurements taken for the purpose of monitoring shall be representative of the monitored activity.
 - b. Except for records of monitoring information required by this permit related to the Permittee's sewage sludge use and disposal activities, which shall be retained for a period of at least five years (or longer as required by 40 CFR Part 503), the Permittee shall retain records of all monitoring information, including all calibration and maintenance records and all original strip chart recordings for continuous monitoring instrumentation, copies of all reports required by this permit, and records of all data used to complete the application for this permit, for a period of at least 3 years from the date of the sample, measurement report or application. This period may be extended by request of the Director at any time.
 - c. Records of monitoring information shall include:
 - 1) The date, exact place, and time of sampling or measurements;
 - 2) The individual(s) who performed the sampling or measurements;
 - 3) The date(s) analyses were performed;
 - 4) The individual(s) who performed the analyses;
 - 5) The analytical techniques or methods used; and
 - 6) The results of such analyses.
 - d. Monitoring must be conducted according to test procedures approved under 40 CFR Part 136 and any subsequent changes to the methods contained therein unless another method is required under 40 CFR subchapters N or O.

- e. The Clean Water Act provides that any person who falsifies, tampers with, or knowingly renders inaccurate any monitoring device or method required to be maintained under this permit shall, upon conviction, be punished by a fine of not more than \$10,000, or by imprisonment for not more than 2 years, or by both. If a conviction of a person is for a violation committed after a first conviction of such person under this paragraph, punishment is a fine of not more than \$20,000 per day of violation, or by imprisonment of not more than four years, or both. [See U.S.C. 1319(c)(4)].

11. Signatory requirements [40 CFR 122.41(k)]. All applications, reports, or information submitted to the Director shall be signed and certified. (See 40 CFR 122.22)

a. Applications. All permit applications shall be signed as follows:

- 1) For a corporation. By a responsible corporate officer. For the purpose of this section, a responsible corporate officer means: (i) A president, secretary, treasurer, or vice-president of the corporation in charge of a principal business function, or any other person who performs similar policy- or decision-making functions for the corporation, or (ii) the manager of one or more manufacturing, production, or operating facilities, provided, the manager is authorized to make management decisions which govern the operation of the regulated facility including having the explicit or implicit duty of making major capital investment recommendations, and initiating and directing other comprehensive measures to assure long term environmental compliance with environmental laws and regulations; the manager can ensure that the necessary systems are established or actions taken to gather complete and accurate information for permit application requirements; and where authority to sign documents has been assigned or delegated to the manager in accordance with corporate procedures.

Note: EPA does not require specific assignments or delegations of authority to responsible corporate officers identified in 40 CFR 122.22(a)(1)(i). EPA will presume that these responsible corporate officers have the requisite authority to sign permit applications unless the corporation has notified the Director to the contrary. Corporate procedures governing authority to sign permit applications may provide for assignment or delegation to applicable corporate positions under 40 CFR 122.22(a)(1)(ii) rather than to specific individuals.

- 2) For a partnership or sole proprietorship. By a general partner or the proprietor, respectively; or
- 3) For a municipality, state, federal, or other public agency. By either a principal executive officer or ranking elected official. For purposes of this section, a principal executive officer of a federal agency includes: a) The chief executive officer of the agency, or b) a senior executive officer having responsibility for the overall operations of a principal geographic unit of the agency (e.g., Regional Administrators of EPA).

b. All reports required by permits, and other information requested by the Director shall be signed by a person described in paragraph 11.a of Part II.B, or by a duly authorized representative of that person. A person is a duly authorized representative only if:

- 1) The authorization is made in writing by a person described in paragraph 11.a;
- 2) The authorization specifies either an individual or a position having responsibility for the overall operation of the regulated facility or activity such as the position of plant manager, operator of a well or a well field, superintendent, position of equivalent responsibility, or an individual or position having overall responsibility for environmental matters for the company, (A duly authorized representative may thus be either a named individual or any individual occupying a named position.) and,
- 3) The written authorization is submitted to the Regional Administrator, U.S. Environmental Protection Agency, Region 2, 290 Broadway, New York, NY 10007-1866, Attention: Compliance Assistance Program Support Branch, and to EQB.

c. Changes to authorization. If an authorization under paragraph 11.b of Part II.B is no longer accurate because a different individual or position has responsibility for the overall operation of the facility, a new authorization satisfying the requirements of paragraph 11.b of Part II.B must be submitted to the Director prior to or together with any reports, information, or applications to be signed by an authorized representative.

- d. Certification. Any person signing a document under paragraph 11.a or 11.b of Part II.B shall make the following certification:

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

- e. The Clean Water Act provides that any person who knowingly makes any false material statement, representation, or certification in any record or other document submitted or required to be maintained under this permit, including monitoring reports or reports of compliance or noncompliance shall, upon conviction, be punished by a fine of not more than \$10,000 per violation, or by imprisonment for not more than 6 months per violation, or by imprisonment for not more than 6 months per violation, or by both. If a conviction is for a violation committed after a first conviction of such person under this paragraph, punishment shall be by a fine of not more than \$20,000 per day of violation, or by imprisonment of not more than four years, or both. (See CWA section 309.c.4).

12. Reporting Requirements [40 CFR 122.41(l)].

- a. Planned changes. The Permittee shall give notice to the Director as soon as possible of any planned physical alterations or additions to the permitted facility. Notice is required only when:
- 1) The alteration or addition to a permitted facility may meet one of the criteria for determining whether a facility is a new source in 40 CFR 122.29(b);
 - 2) The alteration or addition could significantly change the nature or increase the quantity of pollutants discharged. This notification applies to pollutants which are subject neither to effluent limitations in the permit, nor to notification requirements under paragraph 4.a of Part I.B (40 CFR 122.42(a)(1)); or
 - 3) The alteration or addition results in a significant change in the Permittee's sludge use or disposal practices, and such alteration, addition, or change may justify the application of permit conditions that are different from or absent in the existing permit, including notification of additional use or disposal sites not reported during the permit application process or not reported pursuant to an approved land application plan.
- b. Anticipated noncompliance. The Permittee shall give advance notice to the Director of any planned changes in the permitted facility or activity which may result in noncompliance with permit requirements.
- c. Transfers. This permit is not transferable to any person except after notice to the Director. The Director may require modification or revocation and reissuance of the permit to change the name of the Permittee and incorporate such other requirements as may be necessary under the Clean Water Act. (See 40 CFR 122.61; in some cases, modification or revocation and reissuance is mandatory.)
- d. Monitoring reports. Monitoring results shall be reported at the intervals specified in Part III of this permit.
- 1) Monitoring results shall be reported on a Discharge Monitoring Report (DMR) or forms provided or specified by the Director for reporting results of monitoring of sludge use or disposal practices.
 - 2) If the Permittee monitors any pollutant more frequently than required by the permit using test procedures approved under 40 CFR Part 136, or another method required for an industry-specific waste stream under 40 CFR subchapters N or O, the results of such monitoring shall be included in the calculation and reporting of the data submitted in the DMR or sludge reporting form specified by the Director.
 - 3) Calculations for all limitations which require averaging of measurements shall utilize an arithmetic mean unless otherwise specified by the Director in the permit.
- e. Compliance Schedules. Reports of compliance or noncompliance with, or any progress reports on, interim and final requirements contained in any compliance schedule of this permit shall be submitted no later than 14 days following each schedule date.
- f. Twenty four hour reporting.

- 1) The Permittee shall report any noncompliance which may endanger health or the environment. Any information shall be provided orally within 24 hours from the time the Permittee becomes aware of the circumstances to EPA Region 2, Caribbean Environmental Protection Division at (787) 977-5870 and State Director. A written submission shall also be provided within 5 days of the time the Permittee becomes aware of the circumstances. The written submission shall contain a description of the noncompliance and its cause; the period of noncompliance, including exact dates and times, and if the noncompliance has not been corrected, the anticipated time it is expected to continue; and steps taken or planned to reduce, eliminate, and prevent reoccurrence of the noncompliance.
 - 2) The following shall be included as information which must be reported within 24 hours under this paragraph.
 - a) Any unanticipated bypass (see 13 below) which exceeds any effluent limitation in the permit. [See 40 CFR 122.41(g)].
 - b) Any upset (see 14 below) which exceeds any effluent limitation in the permit.
 - c) Violation of a maximum daily discharge limitation for any of the pollutants listed by the Director in the permit to be reported within 24 hours. (See 40 CFR 122.44(g)).
 - 3) The Director may waive the written report on a case by case basis for reports under paragraph 12.f.(2) of Part II.B if the oral report has been received within 24 hours.
 - g. Other noncompliance. The Permittee shall report all instances of noncompliance not reported under paragraphs 12.d, e, and f of Part II.B, at the time the monitoring reports are submitted. The reports shall contain the information listed in paragraph 12.f of Part II.B.
 - h. Other information. Where the Permittee becomes aware that it failed to submit any relevant facts in a permit application, or submitted incorrect information in a permit application or in any report to the Director, it shall promptly submit such facts or information.
13. Bypass [40 CFR 122.41(m)].
- a. Bypass not exceeding limitations. The Permittee may allow any bypass to occur which does not cause effluent limitations to be exceeded, but only if it also is for essential maintenance to assure efficient operation. These bypasses are not subject to the provisions of paragraphs 13.b. and 13.c of Part II.B.
 - b. Notice.
 - 1) Anticipated bypass. If the Permittee knows in advance of the need for a bypass, it shall submit prior notice, if possible at least ten days before the date of the bypass.
 - 2) Unanticipated bypass. The Permittee shall submit notice of an unanticipated bypass as required in paragraph 12.f of Part II.B (24-hour notice).
 - c. Prohibition of bypass.
 - 1) Bypass is prohibited, and the Director may take enforcement action against a Permittee for bypass, unless:
 - a) Bypass was unavoidable to prevent loss of life, personal injury, or severe property damage;
 - b) There were no feasible alternatives to the bypass, such as the use of auxiliary treatment facilities, retention of untreated wastes, or maintenance during normal periods of equipment downtime. This condition is not satisfied if adequate back up equipment should have been installed in the exercise of reasonable engineering judgment to prevent a bypass which occurred during normal periods of equipment downtime or preventive maintenance; and
 - c) The Permittee submitted notices as required under paragraph 13.b of Part II.B.
 - 2) The Director may approve an anticipated bypass, after considering its adverse effects, if the Director determines that it will meet the three conditions listed above in paragraph 13.b.(1) of Part II.B.
14. Upset [40 CFR 122.41(n)].
- a. Effect of an upset. An upset constitutes an affirmative defense to an action brought for noncompliance with such technology-based permit effluent limitations if the requirements of paragraph 14.(b) of Part II.B

are met. No determination made during administrative review of claims that noncompliance was caused by upset, and before an action for noncompliance, is final administrative action subject to judicial review.

- b. Conditions necessary for a demonstration of upset. A Permittee who wishes to establish the affirmative defense of upset shall demonstrate, through properly signed, contemporaneous operating logs, or other relevant evidence that:
 - 1) An upset occurred and that the Permittee can identify the cause(s) of the upset;
 - 2) The permitted facility was at the time being properly operated;
 - 3) The Permittee submitted notice of the upset as required in paragraph 12.f.(2)(b) of Part II.B (24 hour notice); and
 - 4) The Permittee complied with any remedial measures required under paragraph 4 of Part II.B (duty to mitigate).
 - c. Burden of proof. In any enforcement proceeding the Permittee seeking to establish the occurrence of an upset has the burden of proof.
15. Removed substances (33 U.S.C. 1311). Pursuant to section 301 of the Clean Water Act, solids, sludges, filter backwash or other pollutants removed in the course of treatment or control of wastewaters and/or the treatment of intake waters shall be disposed of in a manner such as to prevent any pollutant from such materials from entering navigable waters. The following data shall be reported together with the monitoring data required in paragraph 2 of Part I.B:
- a. The sources of the materials to be disposed of;
 - b. The approximate volumes and weights;
 - c. The method by which they were removed and transported; and
 - d. Their final disposal locations.
16. Oil and hazardous substance liability (33 U.S.C. 1321). The imposition of responsibilities upon, or the institution of any legal action against the Permittee under CWA section 311 shall be in conformance with regulations promulgated pursuant to Section 311 to discharges from facilities with NPDES permits.
17. Reopener clause for toxic effluent limitations [40 CFR 122.44(B)(1)]. Other effluent limitations and standards under CWA sections 301, 302, 303, 307, 318 and 405. If any applicable toxic effluent standard or prohibition (including any schedule of compliance specified in such effluent standard or prohibition) is promulgated under CWA section 307(a) for a toxic pollutant and that standard or prohibition is more stringent than any limitation on the pollutant in the permit, the Director shall institute proceedings under these regulations to modify or revoke and reissue the permit to conform to the toxic effluent standard or prohibition. See also 40 CFR 122.41(a).
18. State laws (33 U.S.C. 1370). Nothing in this permit shall be construed to preclude the institution of any legal action or relieve the Permittee from any responsibilities, liabilities, or penalties established pursuant to any applicable state law or regulation under authority preserved by CWA section 510. The issuance of this permit does not preempt any duty to obtain state or local assent required by law for the discharge.
19. Availability of information (33 U.S.C. 1318). (CWA section 308)
- a. NPDES permits, effluent data, and information required by NPDES application forms provided by the Director under 40 CFR 122.21 (including information submitted on the forms themselves and any attachments used to supply information required by the forms) shall be available for public inspection at the offices of the Regional Administrator and State Director.
 - b. In addition to the information set forth in subsection a., any other information submitted to EPA in accordance with the conditions of this permit shall be made available to the public without further notice unless a claim of business confidentiality is asserted at the time of submission in accordance with the procedures in 40 CFR Part 2 (Public Information).
 - c. If a claim of confidentiality is made for information other than that enumerated in subsection a., that information shall be treated in accordance with the procedures in 40 CFR Part 2. Only information

determined to be confidential under those procedures shall not be made available by EPA for public inspection.

20. Severability. The provisions of this permit are severable, and if any provision of this permit, or the application of any provision of this permit to any circumstance, is held invalid, the application of such provision to other circumstances, and the remainder of this permit, shall not be affected thereby.